

# **Spreadsheet Applications**

Primary Career Cluster:	Business, Management & Administration
Consultant:	Joy Smith, (615) 532-6248, <u>Joy.Smith@tn.gov</u>
Course Code(s):	5893
Recommended Prerequisite(s):	Keyboarding 4-8; Computer Applications (5891/3638/3721)
Credit:	1/2
Grade Level:	10-12
Aligned Student Organization(s):	DECA: www.decatn.org FBLA: www.fblatn.org Sarah Williams, (615) 532-2829, Sarah.G.Williams@tn.gov
Teacher Resources:	http://www.tn.gov/education/cte/BusinessManagementAdministration.shtml

# **Course Description**

Spreadsheet Applications involves the use of electronic worksheets used to perform business calculations. This course will apply keying, typography, layout, and design skills in designing worksheets, writing formulas, analyzing data, charting data, and managing data. Team development will also be stressed as students work on spreadsheet project(s). Student proficiency may lead to software certification. (*This course requires a computerized workstation for required for each student with spreadsheet software.*)

# **Course Standards**

# Standard 1.0

The student will develop and apply concepts related to human relations, safety, career development, communications, and leadership skills for a global workplace.

### The student will:

- 1.1 Demonstrate sensitivity to personal, societal, corporate, and governmental responsibility to community and global issues.
- 1.2 Demonstrate the interpersonal, teamwork, and leadership skills needed to function in diverse business settings, including the global marketplace.
- 1.3 Communicate effectively as writers, listeners, and speakers in diverse social and business settings.

- 1.4 Apply the critical-thinking and soft skills needed to function in students' multiple roles as citizens, consumers, workers, managers, business owners, and directors of their own futures.
- 1.5 Analyze and follow policies for managing legal and ethical issues in organizations and in a technology-based society.
- 1.6 Investigate the life-long learning skills that foster flexible career paths and confidence in adapting to a workplace that demands constant retooling.
- 1.7 Assess personal skills, abilities, aptitudes, and personal strengths and weaknesses as they relate to career exploration and apply knowledge gained from individual assessment to research and develop an individual career plan.
- 1.8 Examine the goals and principles of Future Business Leaders of America.
- 1.9 Investigate online and office safety procedures and pass a written safety examination with 100% accuracy.
- 1.10 Demonstrate parliamentary procedure through office staff/chapter organizational meetings.
- 1.11 Apply appropriate typography concepts to industry documents.

# **Sample Performance Task**

Design and produce a team project on legal and ethical issues that includes issues and penalties for plagiarism, copied text that does not require permission, and copied data that requires permission and the process used in obtaining permission. Obtain formal permission for use of quotations, art form, design, music, and photographs. Develop and present a total team project utilizing various technology components and appropriate typography concepts.

# Standard 2.0

The student will operate the electronic spreadsheet software and create and manipulate a basic worksheet.

#### The student will:

- 2.1 Relate vocabulary terms specific to spreadsheet applications.
- 2.2 Utilize different types of cell entries and editing features.
- 2.3 Format cells, rows, and columns.
- 2.4 Perform document maintenance functions.
- 2.5 Plan and create a customized worksheet.

# **Sample Performance Task**

Prepare a spreadsheet illustrating the number of students participating in a fundraiser. Include each student's name, the number of items sold, cost of each item, and the total amount sold. Calculate the net profit and the percentage of sales for which each student is responsible.



# Standard 3.0

The student will create and enter formulas and format a spreadsheet.

#### The student will:

- 3.1 Create formulas to perform spreadsheet calculations.
- 3.2 Apply font attribute changes to text and values in a spreadsheet.
- 3.3 Use the fill alignment function.
- 3.4 Add a group of values in a range.
- 3.5 Revise values formats in cells.

# **Sample Performance Task**

Prepare a spreadsheet with data. Revise the format of all applicable values to include percentages and currency. Print the spreadsheet. Revise the number of decimal places and print again.

# Standard 4.0

The student will apply spreadsheet enhancement skills.

#### The student will:

4.1 Design and create spreadsheets using special functions to enhance the worksheet.

# **Sample Performance Task**

Students will plan and create a spreadsheet by entering a hypothetical sample class schedule and grades. Using imaginary student names, grades and test scores, calculate the average for each student and overall average for each class

#### Standard 5.0

The student will use special functions to perform special calculations.

# The student will:

5.1 Use special calculation functions to generate an electronic worksheet.

# **Sample Performance Task**

Plan and create a spreadsheet using one of your school's athletic team game schedules and game scores. Using special functions, determine the following: total points scored for the season, lowest and highest scoring games, the number of games played, and the average points scored per game.

# Standard 6.0

The student will produce spreadsheets while using print options for diverse output results.

#### The student will:

- 6.1 Preview, proofread, and edit the spreadsheet before printing.
- 6.2 Print spreadsheets using various page setups.



# **Sample Performance Task**

Plan and create a personal budget using the following data: income (allowance or earnings), expenses (food, education, clothing, entertainment, personal items, transportation, savings, gifts and contributions, miscellaneous). Calculate the percentage of income that is spent on each item. Print a spreadsheet with gridlines and a header and footer in landscape mode. Print a graph or chart using the same data.

# Standard 7.0

The student will create and manipulate the charting tool in the spreadsheet software.

# The student will:

- 7.1 Insert charts using table data
- 7.2 Manipulate charts using design and layout tools
- 7.3 Incorporate appropriate printing style for charts

# **Sample Performance Task**

Create a pie chart based on students' eating habits. Move the chart to a new sheet. Add a title to the chart as well as axis titles. Remove the legend from the chart. Explode the pie chart and change the color of the pieces of the pie.

